4. Quantification of Lost Profits

88. In a lost profits analysis, the patent holder must demonstrate that there is a "reasonable probability that 'but for' the infringing activity, the patentee would have made the infringer's sales." My review of the evidence and my analysis of *Panduit* Factors 1, 2 and 3 above indicates that TruePosition lost sales to STC and Q-Tel based on competition with Andrew's allegedly infringing Geometrix system.

a. STC

89. To estimate TruePosition's lost profits associated with its lost sales to STC, I rely upon a proposal submitted by TruePosition to STC in December 2004. This proposal was for a kingdom-wide rollout of a U-TDOA system for

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90. As mentioned previously, the contract awarded by STC to Andrew appears to contemplate

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Therefore, I have estimated

TruePosition's lost profits assuming that, absent Andrew's infringement, the TruePosition rollout would occur in phases over a five-year period. As shown in Exhibit 7, my calculations assume TruePosition installation of REDACTED

Crystal Semiconductor Corp. v. Tritech Microelectronics Int'l, Inc., 246 F.3d 1336, 1353 (Fed. Cir. 2001).

STCRFP_FinalPricing_12,07.04.xls. See also, Exhibit 6. The unit prices contained in this proposal for the TruePosition provided components — i.e., SMLC hardware and software, LMU hardware and software and OMC hardware and software as well as associated maintenance and spare parts — are identical to those in the May 2005 proposal. STC_PricingUpdate_05.02.05_TP.xls.

STCRFP_FinalPricing_12.07.04.xls, sheet 2.6.1.3.

2007,

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- 91. Projected revenues include revenues from the sale of hardware, and software, and services as well as revenues from spare parts and ongoing annual operation and maintenance. Based on conversations with TruePosition personnel, I understand that TruePosition recommended the purchase of spare parts along with the original purchase of hardware and software, so I have modeled the spare parts cash flows in the same ratio to hardware, software, and services as given in the total bid. As well, it is my understanding that the purchase of annual operation and maintenance would be contractually required by TruePosition. According to conversations with TruePosition personnel, operation and maintenance revenues are anticipated to occur over a minimum of five years beginning with the year of installation of the hardware and software. 158
- 92. My analysis of TruePosition's incremental costs associated with the sale of its Finder system to STC includes manufacturing costs and operating expenses. These include the reported manufacturing costs and other costs of goods contained in TruePosition's proposal worksheets¹⁵⁹ and my estimates of incremental operating expenses.¹⁶⁰

158

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STCRFP_FinalPricing_12.07.04.xls and STC_PricingUpdate_05.02.05_TP.xls.
 See Exhibits 17-18.

93. Based on conversations with TruePosition, it is my understanding that the costs contained in the December 2004 and May 2005 proposal worksheets include all material, labor and overhead costs associated with the production of the hardware and software. In addition, it is my understanding that these costs include shipping expenses. According to conversations with TruePosition personnel, customs duties and taxes, including Zakah taxes,

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94. In addition to these costs, I have deducted from TruePosition's "but-for" revenues incremental operating expenses likely to be associated with the sale to STC. In estimating the magnitude of these costs, I have employed a statistical technique called a regression approach. This approach uses simple linear regression analysis to analyze the historical relationship between changes in costs and changes in sales. My analysis indicates that historically,

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As shown in Exhibit 17, my analysis indicates that

for each additional dollar in revenue, TruePosition's Operations expenses

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See, for example, Deposition of Joseph Sheehan, 11/17/06, [ROUGH, p. 31].

[&]quot;Operations" includes "Operations Support" and "Supply Chain;" see Exhibit 18. Other categories of departmental operating expenses are: Sales and Marketing, Product Development/R&D, General and Administrative, and International. According to Michael Hoppman, Supply Chain expenses are appropriately included in "Subtotal Operations." See Deposition of Michael Hoppman, 11/15/06, [ROUGH, pp. 20-23].

REDACTED Alternatively, these results show that TruePosition's incremental operating expense rate is percent of sales. 163

The reasonableness of the results of my statistical analysis are confirmed by an account-95. based approach to the determination of incremental expenses. TruePosition's Operating Expenses in 2005 include the following categories of expense: (1) Sales and Marketing, (2) Product Development (3) Operations, (4) General and Administrative, and (5) International. According to Michael Hoppman, TruePosition's Chief Financial Officer, Sales and Marketing expenses include expenses for all the cost centers that work on the Sales and Marketing activities of the business.164 Product Development includes salaries and corresponding benefits, consulting fees, and other expenses related to the development of hardware and software products, which is analogous to "research and development expenses" at other firms. 165 Operations is divided into two major categories, one being supply chain, which is responsible for the procurement of goods and services, and the other being support services to the customer, which would include the technical assistance center.166 General and Administrative expenses include salaries for the finance, IT, MIS, legal and human resources departments, facilities costs, rent, telephone and other general expenses, and any salaries for other high level executives, such as the

¹⁶³ Exhibit 17.

Deposition of Michael Hoppman, 11/15/06, [ROUGH, p. 17]. The costs of the International Sales Group are in "International." All marketing costs would be under Sales and Marketing, as the Marketing activities for the company are not into between Domestic and International. See Deposition of Michael Hoppman, 11/15/06, [ROUGH, p. 19].

Deposition of Michael Hoppman, 11/15/06, [ROUGH, pp. 25-27]. See also, Deposition of Michael Hoppman, 5/22/03, pp 134-5.

Deposition of Michael Hoppman, 11/15/06, [ROUGH, pp. 20, 23-24].

President, that aren't recorded in specific departments. 167 International expenses include international sales expenses, and potentially some minor facilities and legal costs. 168

96. Based on conversations with TruePosition personnel, I understand that

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97. Exhibits 7, 8, and 9 show the results of my lost profits calculations with respect to TruePosition's lost sales of its Finder system to STC. Scenario 1 calculates the net present value to TruePosition of its lost sales opportunity to STC over the kingdom-wide

¹⁶⁷ Deposition of Michael Hoppman, 11/15/06, [ROUGH, pp. 27-28, 55].

These expenses have been included with sales and marketing expenses beginning in 2006. Deposition of Michael Hoppman, 11/15/06, [ROUGH, pp. 28-29].

Conversations with TruePosition personnel, 11/20/06.
Conversations with TruePosition personnel, 11/20/06.

Deposition of Michael Hoppman, 11/15/06, [ROUGH, p. 19].

roll out of 8 sites as contemplated in its December 2004 bid. As shown in these three exhibits, lost profits under Scenario 1 total

- Alternatively expressed, TruePosition's lost profits from the STC bid represent an average of approximately per site. 173 Based on conversations with TruePosition personnel, I understand that it is possible that the STC deal had the potential to involve more than the sites contemplated in the December 2004 bid. Should additional evidence become available to support this point, additional lost profits to TruePosition can be estimated by applying this figure to the number of additional sites.
- 99. Scenario 2 calculates TruePosition's lost profits associated with the loss of business associated with Phase I and Phase II. As shown in Exhibits 10, 11, and 12, lost profits under Scenario 2 total million —

b. Q-Tel

173

100. To estimate lost profits due to TruePosition's lost Q-Tel sales, I rely upon two
TruePosition proposals, dated April 13, 2006 and May 12, 2006, which contemplate

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Future revenues and profits have been discounted using a rate of 12 percent, which is consistent with the discount rate used by Andrew in its valuation of TruePosition in 2005 in connection with the acquisition discussions between the two parties. See "Copy of Andrew GAAP Statements Final.meho.ANSinput.resived.xls, at "Summary Cash Flow" sheet. This is also consistent with the discount rate of 11 percent used by TruePosition in its internal valuations of sales opportunities. (Conversations with TruePosition personnel)

installation of the Finder system at.

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The primary difference between the two proposals is that the

May 12, 2006 proposal:

relative to

the April 13, 2006 proposal. These proposals include TruePosition's estimated revenues and costs associated with the manufacture and sale of its Finder system to Q-Tel.¹⁷⁵ In addition to these costs, I also included an estimate of incremental operating expenses as described above.

101. As shown in Exhibits 13 to 16, the net present value of TruePosition's lost profits associated with the lost O-Tel bid total

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c. Other

102. In addition to the accused sales to STC and Q-Tel, the evidence shows that both Andrew and TruePosition expected there to be significant follow-on sales in the Middle East as a

[&]quot;Reply to Request for Proposal, Location-Based Services (LBS) Platform, Executive Summary, December 2004"; Proposal for Deployment of the Finder System for Safety and Security Applications, Prepared for Qatar Telecom (Q-Tel), April 13, 2006 and QatarPricing_05.12.06.xls.

As with the STC proposal (i.e., Proposal #275 – QAT0604MW-1), TruePosition's Q-Tel proposal included the use of Nour Communications to handle installation, testing, front-line support and maintenance. See TruePosition's Proposal for Deployment of the FinderTM System for Safety and Security Applications, Prepared for Qatar Telecom (Q-Tel), April 13, 2006, Proposal Number #275-QAT0604MW-1, p. 16.

Optional components include drive test tool hardware and software. See TruePosition's Proposal for Deployment of the FinderTM System for Safety and Security Applications, Prepared for Qatar Telecom (Q-Tel), April 13, 2005, Proposal Number #275-QAT0604MW-1, p. A-2, QatarPricing_04.13.06.xls, sheet "Price Quote", and QatarPricing_05.12.06.xls, sheet "Price-Cost."

result of the STC contract award. For example, Andrew believed that

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Furthermore.

in the International section of its February 2006 Geolocation Business Review, Andrew noted its intention to REDACTED

As mentioned previously, TruePosition was informed by Nour that other operators would follow the "lead of STC." Yet, it is evident that TruePosition held this belief independent of Nour; when asked in his deposition why the STC deal was important to TruePosition, Joseph Sheehan, TruePosition's President and COO, answered:

One, it was a significant sized deal. There was a significant amount of potential profit, money, revenue associated with it. On top of it, it was – strategically, it was the first real opportunity or potentially the first purchase outside of the U.S. of our products and U-TDOA technology in general. Also they were viewed as a leader amongst the operators ... that would potentially be interested in our technology and products as it related to security-type applications and commercial location-based services. ... They have a significant amount of influence in that part of the world. They tend to be leaders, early adopters of new services, new technologies, things of that nature. 180

103. In the event that Andrew's alleged infringement has precluded TruePosition from being awarded the STC contract, it seems likely that this will result in a lower probability of

PX-241. Joseph Kennedy, Jr., stated: "... [if]U-TDOA could be deployed in Saudi Arabia and it produced the success for the security apparatus in the country, then other countries that cared about security and enhanced security issues would be inclined to consider it for purchase." See Deposition of Joseph Kennedy, Jr., 11/9/06, Vol. 2, pp. 53-54.

¹⁷⁸ AND_EF0092594, pp. 9-10.

¹⁷⁹ DX-9 (TPI-E0002790).

Deposition of Joseph Sheehan, 10/19/06, pp. 106-107.

TruePosition being awarded such follow-on work. I have not attempted to quantify the magnitude of this harm. Should additional information relevant to this point become available, I will update my opinions accordingly. In any event, it suggests that the estimates presented here may understate the true magnitude of the financial injury to TruePosition.

104. As confirmation of this point, I note that Andrew's own valuation analysis of TruePosition demonstrates

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V. PREJUDGMENT INTEREST

105. Courts allow injured parties to receive prejudgment interest on damages awards in order to compensate successful plaintiffs for the time value of their losses. The appropriate interest rate is one that fairly compensates the plaintiff for the time value of its money while properly accounting for risk in a financial sense. Should the Court determine that

¹⁸¹ TPI0042415.

¹⁸² TP10042416.

prejudgment interest is due to TruePosition after a judgment is entered in this case, the appropriate interest rate to use is the after-tax short-term Treasury Bill rate.

106. This relatively low, mostly riskless rate is the appropriate prejudgment interest rate because it conforms to the fundamental tenet of finance that investors who bear less risk should earn lower profits, or returns. Conversely, higher returns accrue to investors that bear higher risks. I have summarized these rates from January 2005 through December 2006 in Exhibit 19.

VI. CONCLUSIONS

107. In the event that Andrew is found liable for infringement of the '144 patent, my analysis of the *Panduit* factors as set forth above indicates that TruePosition is entitled to lost profits damages resulting from Andrew's infringing sales of Geometrix systems to STC and Q-Tel. As discussed in detail above, the net present value of TruePosition's lost profits associated with Andrew's sales to STC are estimated to range from

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Exhibit 1.

⁸⁴ Ibid.

108. As the allegedly infringing activities are ongoing, the magnitude of Andrew's actual and/or expected infringing sales at the time of trial may be different from those contemplated in the analysis set forth here. Therefore, I reserve the right to update my calculations to reflect additional information as appropriate.

Carla S. Mulhern December 1, 2006 Appendix A

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Carla Mulhem, a Managing Principal at Analysis Group, specializes in the application of microeconomic principles to issues arising in complex business litigation. She has served as an expert witness on damages issues in commercial litigation matters including intellectual property and breach of contract cases. Her intellectual property damages experience spans cases involving allegations of patent, copyright and trademark infringement as well as misappropriation of trade secrets. In addition, she has worked with leading academic experts on commercial litigation matters including intellectual property, antitrust and breach of contract.

Ms. Mulhern's project experience spans a variety of industries including pharmaceuticals, medical devices, automotive, entertainment, consumer products, computer hardware and software, semiconductors and telecommunications. She has assisted clients in all aspects of litigation projects including development and review of pretrial discovery, development of economic and financial models to analyze damages, critique of analyses propounded by opposing experts, and preparation of testimony.

In non-litigation matters, Ms. Mulhern has assisted clients in valuing intellectual property and other business assets in the contexts of strategic alliances involving licensing and joint ventures. In addition, she has consulted on matters involving the application of economic principles to issues arising in the pharmaceutical and health care fields.

Ms. Mulhern previously held consulting and research positions at Putnam, Hayes & Bartlett and National Economic Research Associates (NERA). She holds a M.Sc. in Economics from the London School of Economics and Political Science, and a B.S. in Mathematics from Bucknell University.

EDUCATION

1988 M.Sc. in Economics, London School of Economics and Political Science, London,

England

1987 Diploma with Merit in Economics, London School of Economics and Political Science,

London, England

1986 B.S. in Mathematics, Bucknell University, Lewisburg, PA

PROFESSIONAL EXPERIENCE

1997 - present Analysis Group, Inc., Washington, DC

1994 - 1997 Putnam, Hayes & Bartlett, Inc., Washington, DC

1989 - 1994 National Economic Research Associates, Inc., Washington, DC

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EXPERT REPORTS/TESTIMONY

In the Matter of Certain NOR and NAND flash memory devices and products containing same,
 Investigation No. 337-TA-560

U.S. International Trade Commission, Washington, D.C.

Patent infringement: expert report (2006) and deposition testimony (2006) regarding plaintiff's claims of domestic industry, scope of exclusion order and appropriate amount of bond to be set for products covered by exclusion order during Presidential review period in Section 337 case involving NAND and NOR flash memory products.

Intex Recreation Corp. v. Team Worldwide Corp.

U.S. District Court, Washington, D.C.

Patent infringement: expert report (2006) and deposition testimony (2006) in a patent infringement case involving inflatable air mattresses. Provided testimony on lost profits and reasonable royalty damages.

In the Matter of Certain Flash Memory Devices and Components Thereof, and Products Containing Such Devices and Components, Investigation No. 337-TA-552

U.S. International Trade Commission, Washington, D.C.

Patent infringement: expert report (2006) and deposition testimony (2006) regarding certain secondary considerations, as well as plaintiff's claims of domestic industry, scope of exclusion order and appropriate amount of bond to be set during Presidential Review period in Section 337 case involving NAND flash memory products.

In the Matter of Certain Baseband Processor Chips and Chipsets, Transmitter and Receiver (Radio) Chips, Power Control Chips and Products Containing Same, Including Cellular Telephone Handsets, Investigation No. 337-TA-543

U.S. International Trade Commission, Washington, D.C.

Patent infringement: expert reports (2005 and 2006), deposition testimony (2006) and trial testimony (2006) regarding scope of exclusion order associated with baseband and radio chips used in cellular telephones and other handheld devices in Section 337 case.

In the Matter of Certain NAND Flash Memory Circuits and Products Containing the Same, Investigation No. 337-TA-526

U.S. International Trade Commission, Washington, D.C.

Patent infringement: rebuttal expert report and deposition testimony (2005) regarding plaintiff's claims of domestic industry, scope of exclusion order and appropriate amount of bond to be set for products covered by exclusion order during Presidential review period in Section 337 case involving NAND flash memory products.

PDI, Inc. v. Cellegy Pharmaceuticals, Inc.

U.S. District Court, Northern District of California, San Francisco

Commercial damages: expert report and deposition testimony (2005) regarding analysis of damages arising from claims of fraud and breach of contract in case involving pharmaceutical product.

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Minuteman Trucks, Inc. v. HN80 Corporation and Sterling Truck Corp.

Superior Court of Massachusetts, Suffolk County

Commercial damages: rebuttal expert report and trial testimony (2004) regarding issues related to calculation of damages associated with alleged violation of Massachusetts statue regarding dealer pricing in case involving heavy trucks.

Miltope Corporation and IV Phoenix Group Inc, v. DRS Technologies et al.

U.S. District Court, Eastern District of New York

Misappropriation of trade secrets: expert report and deposition testimony (2003) on reasonable royalty damages in case involving rugged personal computers.

John W. Evans, et al., v. General Motors Corp.

Superior Court of Connecticut, Judicial District of Waterbury at Waterbury
Misappropriation of trade secrets: expert report, deposition testimony (2002) and trial testimony
(2003) on reasonable royalty damages in a case involving automotive engine technology.

SRAM Corporation v. AD-II Engineering, Inc.

U.S. District Court, Northern District of Illinois

Patent infringement: expert report and deposition testimony (2002) on reasonable royalty damages due patent holder and lost profits due alleged infringer arising from allegedly false accusations involving patents related to bicycle twist-shifters.

Owest Communications International et al. v. WorldQuest Networks, Inc.

U.S. District Court, Eastern District of Virginia

Trademark infringement and unfair competition: expert report on damages in a case involving sales of prepaid calling cards.

The Quigley Corporation v. GumTech International, et al.

U.S. District Court, Eastern District of Pennsylvania

Patent infringement: expert report and deposition testimony (2001) on damages in case involving patent related to the use of zinc gluconate to reduce the duration of the common cold.

Cytyc Corporation v. Autocyte, Inc.

U.S. District Court, District of Delaware

Patent infringement: expert report and deposition testimony (2000) on damages in a case involving liquid based cervical cancer screening tests.

Hearthstone, Inc. v. Ronald M. Hawes, et al.

U.S. District Court, Eastern District of Virginia

Copyright and trademark infringement, breach of contract and unfair competition: expert report on damages involving architectural plans for log homes.

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SELECTED CONSULTING ASSIGNMENTS

Commercial Damages/Intellectual Property Damages

- Medinol Ltd. v. Boston Scientific Corp.
 - U.S. District Court, Southern District of New York

Breach of contract damages: analyze damages resulting from allegations of breach of contract and misappropriation of trade secrets in case involving coronary stents.

- Burst.Com v. Microsoft Corp.
 - U.S. District Court, District of Maryland

Patent and trade secrets damages: analysis of reasonable royalty damages in case involving software used for streaming media. Respond to plaintiff's claim of lost profits damages and unjust enrichment arising from the misappropriation of trade secrets.

- Medtronic AVE v. Advanced Cardiovascular Systems and Guidant Corp.
 - U.S. District Court, District of Delaware

Patent and trade secrets damages: analysis of lost profits and reasonable royalty damages in case involving coronary stents. Respond to plaintiff's claim of damages arising from misappropriation of trade secrets.

- Bristol-Myers Squibb Co. v. Rhone-Poulenc Rorer Inc. et al.
 - U.S. District Court, Southern District of New York

Patent damages: reasonable royalty covering patent directed to semi-synthetic process for manufacturing Taxol (anti-cancer drug).

- Titan Sports, Inc., etc. v. Turner Broadcasting Systems, Inc. et al.
 - U.S. District Court, District of Connecticut

Copyright and trademark damages: unjust enrichment due to misappropriation of intellectual property involving two popular wrestling characters.

- Arthur A. Collins, Inc. v. Northern Telecom Limited, and Northern Telecom Inc.
 - U.S. District Court, Eastern District of Virginia

Patent damages: reasonable royalty and prejudgment interest for patents directed to telecommunications switching equipment.

- Stairmaster Sports/Medical Products, a Limited Partnership v. Groupe Procycle, Inc. et al.
 - U.S. District Court, District of Delaware

Patent damages: lost profits, reasonable royalty and prejudgment interest involving patent directed to stair-climbing fitness equipment.

- BTG v. Magellan Corp./BTG v. Trimble Navigation
 - U.S. District Court, Eastern District of Pennsylvania

Patent damages/intervening rights: reasonable royalty, prejudgment interest, value of inventory on hand, preparation and investments made and business commenced (as of patent reissue) involving a patent directed to secret or secure communications technology employed in global positioning system products.

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Joint Medical Products Corp. v. DePuy Orthopaedics, Inc. et al.

U.S. District Court, District of Connecticut

Patent damages: lost profits and reasonable royalty for patents directed to orthopedic implants.

Cordis Corp. v. SciMed Life Systems, Inc.

U.S. District Court, District of Minnesota

Patent damages: lost profits, reasonable royalty and prejudgment interest for patent directed to balloon catheters used in Percutaneous Transluminal Coronary Angioplasty (PTCA).

Nexstar Pharmaceuticals, Inc. v. The Liposome Company

U.S. District Court, District of Delaware

Patent damages/intervening rights: Valuation of inventory on hand, preparations and investments made and business commenced (as of patent reissuance) involving patents directed to lipid formulations of an anti-fungal pharmaceutical.

Autonation, Inc. v. Acme Commercial Corp., at al. (CarMax)

U.S. District Court, Sourthern District of Florida

Trademark infringement/unfair competition: reasonable royalty associated with trademark infringement and unfair competition in the auto superstore business.

General Motors (GM) v. Lopez

U.S. District Court, Eastern District of Michigan

Trade secrets: analysis of GM damages and VW unjust enrichment due to alleged theft of trade secrets by former GM employee.

Antitrust Litigation

* Burst.Com, Inc. v. Microsoft Corp.

U.S. District Court, District of Maryland

Examination and evaluation of plaintiff's business strategy and likely implications with respect to plaintiff's claims of actual damages due to alleged antitrust violations.

In Re Microsoft Corp. Antitrust Litigation – All Purchaser Actions

U.S District Court, District of Maryland

Analysis of economics of computer software industry and resulting implications for market structure and firm profitability.

Microsoft I-V Cases

Superior Court of The State of California, for The City and County of San Francisco
Analysis of economics of computer software industry and resulting implications for market structure
and firm profitability.

Vitamin Antitrust Litigation

U.S. District Court, District of Columbia

Preliminary analysis of factors affecting supply and demand for Vitamin C.

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Industrial Silicon Antitrust Litigation

U.S. District Court, Western District of Pennsylvania Analysis of issues related to likelihood of successful cartelization in production of industrial ferrosilicon, magnesium ferrosilicon, and silicon metal.

Independent Service Provider v. IBM

Texas State Court, Corpus Christi

Analysis of issues related to liability and damages including definition of relevant market, assessment of market concentration and evaluation of antitrust damages.

OTHER CONSULTING ASSIGNMENTS

- Corporate Committee of The American College of Nuclear Physicians
 Analyses of the clinical and economic value of nuclear medicine in cardiology and oncology.
- Lincoln General Hospital

 Business valuation of two health care providers for use in determining relative shares of the parties in a joint venture.
- Pharmaceutical Partners For Better Health Care
 Comprehensive study of the Canadian health care system with particular emphasis on the effects of potential reforms on the pharmaceutical industry.

PUBLICATIONS

"Use of the 25 Per Cent Rule in Valuing IP," (with R. Goldscheider and J. Jarosz), *les Nouvelles*, Volume XXXVII No. 4, December 2002, pp. 123-133.

"Clinical and Economic Value of Cardiovascular Nuclear Medicine," monograph published by *Meniscus Health Care Communications*, (with K. Neels), 1996.

"The Health Care System in Canada," (with R. Rozek), Chapter 4, Financing Health Care, edited by U. Hoffmeyer and T. McCarthy, Kluwer Academic Publishers, 1994.

"Discounted Cash Flow Analysis in Patent Infringement Litigation," (with R. Rozek), Licensing Economics Review, Volume 1, August 1991, pp. 7-10

SPEECHES/PRESENTATIONS

"Reasonable Royalty Determination in the Presence of Standards and University Licensing," Law Seminars international, Calculating and Providing Patent Damages Workshop, October 2006.

"Providing Effective Royalty Testimony," Licensing Executives Society / Association of University Technology Managers Spring Meeting (Workshop 4-H), May 2006 (with John Jarosz and Lisa Pirozzolo).

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"Meeting the Standards for Price Brosion and Convoyed Sales," Law Seminars International, Calculating and Providing Patent Damages Workshop, February 2006.

"Intellectual Property Damages From An Economist's Perspective," DC Bar Association, Trade Secret Section, November 2005 (with John Jarosz an Abram Hoffman).

"Factors affecting Royalties" Licensing Executive Society Annual Meeting (Workshop 2-M), October 2005 (with Robert Vigil).

"Trade Secrets Damages: What Can A Successful Claimant Expect to Recover?," Trade Secrets Committee of the Intellectual Property Law Section of the D.C. Bar, February 2005.

"Economics of Price Erosion and Lost Convoyed Sales," Law Seminars International, Calculating and Proving Patent damages Workshop, March 2004.

"An Economist's Perspective on Reach-Through Royalties," Law Seminars International, Calculating and Proving Patent Damages: Recent Developments and New Tools for Success, June 2003.

"Trade Secrets Damages and Recent Developments," Trade Secrets Committee of the Intellectual Property Law Section of the D.C. Bar, May 2002.

"Industry Royalty Rates and Profitability: An Empirical Test of the 25% Rule," Licensing Executives Society Annual Meeting (Workshop 3-L), October 2001 (with John Jarosz and Robert Vigil).

"Estimating the Economic Value of Trade Secrets," U.S. Sentencing Commission (USSC) Symposium on Federal Sentencing Policy for Economic Crimes and New Technology Offenses, October 13, 2000.

"Estimating Economic Recovery in Trade Secrets Cases," Trade Secrets Committee of the Intellectual Property Law Section of the D.C. Bar, September 1999.

"Industry Royalty Rates and Profitability: An Empirical Test of the 25% Rule," Licensing Executives Society Annual Meeting, (Workshop 3-11), October 1998 (with John Jarosz).

"Royalty Rates and Awards in Patent Infringement Cases: 1916-1996," Licensing Executives Society Annual Meeting, November 1997 (with John Jarosz).

PROFESSIONAL AFFILIATIONS

American Economic Association (AEA)

Licensing Executives Society (LES)

APPENDIX B

DOCUMENTS REVIEWED AND/OR RELIED UPON

Bates Numbers	Document 1Ds	Bates Numbers
Dates Numbers	Document and	
AND0073702	AND_EF0017687	TP10042415 - TF10042422
AND0073758	AND_EF0017688	
AND0073784	AND_EF0017692	Document IDs
AND0075771 - AND0075808	AND_EF0017754	
AND0075820 - AND0075833	AND_EF0017756	TPI-E0000306
AND0075981	AND_EFOD17757	TPI-E0000309
AND0075992 - AND0075993	AND_EF0017789	TPI-E0000310
AND0075994 - AND0075995	AND_EF0017856	TPI-E0000311 ·
AND0076009	AND_EF0017924	TF1-E0000312
AND0076010	AND_EF0018009	TF1-E0000313
AND0076018	AND_EF0018011	TP1-E0000314 TP1-E0000315
AND0076019	AND_EFOD18012	TP1-E0000315
AND0076020	AND_EF001802B	TP1-E0000317
AND0076028	AND_EF0018029 AND_EF0D18034	TP1-E0000320
AND0076030	AND EFOD18035	TP1-E0000347
AND0079658 - AND0079660 AND0079661 - AND0079663	AND_EFOD18036	TP1-E0000348
AND0079664	AND EF0018037	TP1-E0000350
AND0079668 - AND0079672	AND EF0018038	TPI-E0000351
AND0079756 - AND0079753	AND EF0018050	TPI-E0000352
AND0079766 - AND0079767	AND EF0018074	TP1-E0000353
AND0080258 - AND0080259	AND_EF0018079	TPI-E0000354
	AND_EF0018166	TP1-E0000355
Document IDs	AND_EF0D18341	TP1-E0000356
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AND_EF0000105	AND_EF0018457	TP1-E0000359
AND_EF0000108	AND_EF0018550	TP1-E0000360
AND_EF0000109	AND_EF0018558	TP1-E0000361 TP1-E0000362
AND_EF0000116	AND_EF0018559	TP1-E0000363
AND_EF0000129	AND_EF0018560 AND_EF0018561	TP1-E0000364
AND_EF0000169 AND_EF0000178	AND_EF0018567	TP1-E0000365
AND EF0000197	AND EF0018572	TP1-E0000366
AND_EF0000215	AND EF0018573	TP1-E0000368
AND EF0000224	AND_EF0018574	TP1-E0000369
AND EF0000225	AND EF0018577	TP1-E0000370
AND EF0000241	AND_EF0018578	TP1-E0000371
AND_EF0000256	AND_EF0018579	TP1-E0000372
AND_EF0000259	AND_EF0018581	TF1-E0000373
AND_EF0000260	AND_EF0018583	TP1-E0000374
AND_EF0000262	AND_EF0018584	TPI-E0000375
AND_EF0000Z65	AND_EF0018585	TP1-E0000376
AND_EF0000276	AND_EF0018586	TP1-E0000377
AND_EF0000279	AND_EF0018587	TP1-E0000381
AND_EF0000281	AND_EF0018588	TPI-E0000382
AND_EF0000282	AND_EF0018589	TP1-E0000383 TP1-E0000384
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APPENDIX B

DOCUMENTS REVIEWED AND/OR RELIED UPON

Andrew Documents:		TruePosition Documents:
Document IDs	Document IDs	Document IDs
AND EEODODZIE	AND EF0018600	TP1-E0000395
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DOCUMENTS REVIEWED AND/OR RELIED UPON

Andrew Documents:

TruePosition Documents:

ndrew Documents:		TriePosition Documents:
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DOCUMENTS REVIEWED AND/OR RELIED UPON

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DOCUMENTS REVIEWED AND/OR RELIED UPON

TruePosition Decuments:

Andrew Documents:		TruePosition Documents:
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DOCUMENTS REVIEWED AND/OR RELIED UPON

TruePosition Documents:

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APPENDIX B

DOCUMENTS REVIEWED AND/OR RELIED UPON

Document IDs	drew Documents:		TruePosition Documents:
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TPI-E0016514 TPI-E0016515 TPI-E0016516	AND_EF0017686		
± TPI-E0016515			
TP1-E0016516			
	<u>.</u>		
TPI-E0016517	• •		
	•		TPJ-E0016517

TP1-E0016518

APPENDIX B

DOCUMENTS REVIEWED AND/OR RELIED UPON

Andrew Documents:

TruePosition Documents:

. Document IDs	
TPI-E0016548	
TPI-E0016549	
TP1-E0017104	
TP1-E0017105	
TP1-E0017106	
TPI-E0017107	
TP1-E0017108	
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TPI-E0017156	
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TPI-E0017158	
TPI-E0017159	

APPENDIX B

DOCUMENTS REVIEWED AND/OR RELIED UPON

Andrew Documents:

TruePosition Documents:

Document IDs
TPT-E0017160
TPI-E001716)
TPI-E0017162
TPI-E0017163
TPI-E0017164
TPI-E0017165
TPI-E0017166
TPI-E0017167
TPI-E0017168
TPI-E0017169
TPI-E0017170
TPI-E0017173
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TPI-E0017183
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TPI-E0017185
TPI-E0017186
TPI-E0017187
TPI-E0017188
TPI-E0017616
TPI-E0017617
TPI-E0017618
TPI-E0017619
TPI-E0017620
TPI-E0017621
TPI-E0017654
TPI-E0017655

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HE Potential 5 27: 144

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Document 220-2

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DOCUMENTS REVIEWED AND/OR RELIED UPON

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EXHIBIT 1

SUMMARY OF DAMAGES

[1] [2].	Ongoing Operation and Maintenance
	ost Profits on STC Proposal; Scenario 2 —
[5]	
[6]	
	Ongoing Operation and Maintenance
[8]	Cotal Cotal
ŗ	Lost Profits on Q-Tel Proposal —
[9]	Hardware, Software and Professional Services
	Optional Components
[11]	·
	Ongoing Annual Support
[13]	
	Notes & Sources:
[1]	From Exhibit 7.
[2]	From Exhibit 8.
	From Exhibit 9.
[4]	=[1]+[2]+[3].
[5]	From Exhibit 10.
[6]	From Exhibit 11.
[7]	From Exhibit 12.
[8]	= [5] + [6] + [7].
2.2	From Exhibit 13.
	From Exhibit 14.
	From Exhibit 15.
	From Exhibit 16.
[13]	= [9] + [10] + [11] + [12].

EXHIBIT 2

TRUEPOSÍTION, INC. INCOME STATEMENT - GAAP BASIS MILLIONS

. - .

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Andrey Corporation income statement - gaaf basis millions

EXORDET'S

	FY 2003	_	FY 2004	_	FY 2005		FY30063		Total	
•	왜	*1	×	27	ч	ᅿ	*	Z.	બ	শ্ৰ
Sales.	1,000	40 046	5823.3	45.0%	SI.049.8	33.5%	\$1,248	38.2%	\$3.77.4	53,7%
Here Cathon Sultrestons	27.77.7	27.5%	5497.6	27.23	\$446.0	12.7%	\$10\$	23.5%	21,686,3	27.7%
Matth Calation	341.0	*	\$175.4	9.6%	5157.4	K.0%	ĕ	Ţ	57.	Ġ.
Winders Incoming	3,148	4.1%	5123.2	6.73	\$108.5	K.6%	96	ğ.	5313.2	7,47
Salelite Communications	183.1	1,4%	5208.9	11.47	5139.6	7.1%	212	3.73	2333.6	0.00
Total Soler	\$1,011.7	100.0%	\$1,828,4	%0'00f	\$1,961.2	100,075	32,146.1	100.0%	\$6,947.4	44n'00
Cost of Products Sold	\$739.5	77.17	51,385,1	75,836	\$1,524,4	27,7%	\$1,672.7	27,075	\$5,321.7	76.6%
Grass Profit	#173	26.9%	5443	34.2%	SATAR	22.2%	5473.4	22.1%	\$1,623.7	23.4%
Programs Asymptotics	484.2	3.3%	5110.2	6,00%	\$107.9	5.5%	9113.0	£3%	\$415.2	6.0%
Salve and Administrative	5148.9	7.7%	\$217,6	₹6: -	\$221.8	11.4%	\$255,2	8	2847.5	× 2
Torone ibia Americador	0.612	76.1	537.6	7.2	327.1	7.	0,61\$	S	201.7	
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Total Operating Expenses	P'chye	* Jn't *	ing?							
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Antenna and Crick Products	\$128.7	2.7	5197.7	2 2	0 (13)	71.	Ę	7	(\$53.2)	1.8%
Ilma Station Subsystems	(Tallet	ž:	Ē.	7		21.6	ì	1	67879	77%
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Wireless Investations	ż	\$ 0 0 0	****		200	356	312	d A	(\$44.7)	70.0
Satellito Communications			(1,4.6)			76.5	7	97.0	(\$151.m)	6.53
L'hallocated Sales med Administratives Costs	(page)	2 2	(9)113'6)		(27.1)	2	6153	764	(\$57.7)	ž
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Com (Lots) on State of Alexa	1	į	1			•	ទី	72.0	114J	0.2%
Total Operating theory	\$73.2	72%	9'955	3.1%	\$113	4,0%	£83.3	3,9%	ราศร	3.2%
Other Expense (Treams), Nets	;		i	į	;	900		4		77.0
Infared Expands	25.7	0.5%	Sld	0.87	1	242.0	7 6	746.0	200	20.0
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Other Expense (Income), Net	(21.5)	2,13	į,	2	1				3	į.
Total Other Expanso (means), Not	925	0.3%	2147	1,47%	5,50		1		,	;
Treitz Iscomo	230.6	2,0%	542.3	23%	\$103	32%	\$69.1	3.2%	\$193.2	2.8%
Income Textes	23.6	0.4%	\$13.4	0.7%	\$24.3	1,27	\$100,4	4.8%	\$144,7	2,1%
Not Institut	DZIS	*	528.9	1.6%	538.9	2.17%	(CHIS)	1.0%	\$30.5	0.7%

io FY 1009 and FY 7004 fearch are ared. 8 Depart on milded in milions, NI other fearch arediable in thousands. Conseptonity, Silse and Operaling teroms solid are stated with a figher degree affectuary.

EXHIBIT 4

ANDREW CORPORATION
NETWORK SOLUTIONS GROUP PROFIT AND LOSS STATEMENT
THOUSANDS

REDACTED

EXHIBIT 5

ANDREW CORPORATION
GEO BUSINESS UNIT PROFIT AND LOSS STATEMENT
THOUSANDS

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HANDEPOSITION BID TO STC (DECEMBER 7, 2004)

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EXHIBIT 6 TRUEPOSITION BID TO SIC (DECEMBER 7, 2004)

CONTIDENTIAL - SUBJECT TO PROTECTIVE ORDER

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EXHIBIT'7

The state of the s		KEDACIED		
		ting Expenses (4.6%)		12/1/2006
[2] Revenue	[3] Costs	[4] Incremental Operating Expenses (4.6%)	[5] Operating Profit	[6] Discount Factor to 12/1/2006

[1] Sites Deployed

Notes & Sources:

[7] Not Prosent Value

See AND0080258 and Deposition [1] Assumes total rollout of sites; see Exhibit 6. of Remaining sites divided equally among the years 2008 through 2010.

Filed 05/24/2007

[2] Total from Exhibit 6. Revenue allocated according to proportion of sites deployed in each year ([1]), assuming that revenue is received one year after sites are deployed.

[3] Assumes that costs are incurred in year of deployment. Calculated as [2] for the following year.

(the ratio of TruePosition Hardware, Software)

from Exhibit 17).

and Services Costs to TruePosition Hardware, Software and Services Revenue from Extitut 6).
[4] Assumes that costs are incurred in year of deployment. Calculated as [2] for the following year [5] = [2] - [3] - [4].
[6] Discount factor as follows, assuming mid-year cash flows:

2006 from Exhibit 19.

2007 through 2011 calculated as $1/(1+r)^y$, where y is the number of years between the date of the given cash flow and December 1, 2006, and r=12% is the rate from Copy of Andrew GAAP Statements Final meho.ANSinput.rovised.xls, sheet "Summary Cash Flow."

[7] = [5] * [6].

See AND0080258 and Deposition

CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER

EXHIBIT 8

[3] Costs	REDACTED
[4] Incremental Operating Expenses (4.6%)	
[5] Operating Profit	
[6] Discount Factor to 12/1/2006	
[7] Net Present Value	

[2] Spare Parts Rovenue

[1] Sites Deployed

[2] Total from Exhibit 6. Revenue allocated according to proportion of sites deployed in each year ([1]), assuming that revenue is received one year after sites are deployed. [3] Assumes that costs are incurred in year of deployment. Calculated as [2] for the following year (the matio of TruePosition Spare Parts for VAS) 2007 through 2011 calculated as 1/(1 + r), where y is the number of years between the date of the given cash flow and December 1, 2006, and r= 12% is the (from Exhibit 17). Elements Costs to TruePosition Spare Parts for VAS Elements Revenue from Exhibit 6).

[4] Assumes that costs are incurred in year of deployment. Calculated as [2] for the following year [5] = [2] - [3] - [4].

[6] Discount factor as follows, assuming mid-year cash flows: 2006 from Exhibit 19.

of Randy B. Wynn, October 10, 2006, at 149-51 and PX-146. Remaining sites divided equally among the years 2008 through 2010.

sites; see Exhibit 6, Assumes that

[1] Assumes total rollout of

rate from Copy of Andrew GAAP Statements Final.mcho.ANSinput.revised.xls, sheet "Summary Cash Flow," [7] = [5] * [6]. Document 220-2

CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER

EXHIBIT'9

SCENARIO I
TRUEPOSITION LOST PROFIT ON ONGOING OPERATION AND MAINTENANCE
STC KINGDOM-WIDE BID- LAUIS

	[2] Hardware, Software and Services Revenue [3] Communive Hardware, Software and Services (Five Your Rolling)
-	: and Servie ur, Softwar }
ployed	Hardwate, Software Camulative Hardwa (Five Yours Rolliny)
[1] Sites Doployed	(3) Hardwa [3] Camulo (Five Y

[4] Ongoing Operation and Maintenance Revenue

REDACTED

[5] Costs

[6] Incremental Operating Exponses (4.674)

[7] Operating Profit

[8] Discount Factor to 12/1/2006

[9] Net Present Volug

Set ANDO080258 and Deposition of Randy B. Wyun, Octobor 10, 2006, nt 149-51 and PX-146.

ation and Maintenunce hereuse to Trustodilian Hardware, Software and Sarrieus Rosense from Exhibit of. Assumos that each installment of Handware, Software

(the ratio of TracPosition Operation and Maintenarry Costs to TracPosition Operation and Uninstance Revenue from Balibit 6). •(from Balibit 17).

2007 through 2015 calculated as 1 / (1 + v)*, where y is the armiter of years between the dele of thu given cash flow and Documber 1, 2006, and r = 12% is the rate from Copy of Andrew GAAP Statements Final method NSinput, revisable the sheet Square 1 / (1 + v)*.

[1] Sites Deployed

CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER

EXHIBIT 10

TRUEPOSITION LOST PROFIT ON HARDWARE, SOFTWARE AND SERVICES LMUS PHASE I AND PHASE II -SCENARIO 2

	REDACTED					Notes & Sources: [1] Assumes that: of Randy B. Wynn, October 10, 2006, at 149-51 and PX-146. [2] From Exhibit 7. Assumes that revone is only received on sites deployed in 2006 and 2007, and that revenue is	received one year and since are unpayed. Salumined as [2] for the following year saumes that costs are incurred in year of deployment. Calculated as [2] for the following year (the ratio of TruePosition Hardware, Software and Services Costs to TruePosition Hardware, Software and Services
[2] Revenue	[3] Costs	[4] Incremental Operating Expenses (4,6%)	[5] Operating Profit	[6] Discount Factor to 12/1/2006	[7] Net Present Value	Notes & Sources. [1] Assumes that: of Randy B. Wynn, October 10, 2006, at 149-51 and PX-146. [2] From Exhibit 7. Assumes that revenue is only received on sites	received one yest and such and negaryon. [3] Assumes that costs are incurred in year of deployment. Calculated as [2] for the following year (the ratio of TracePosition Hardware, Software and Services Costs to TracePosition Hardware, S

2007 through 2011 calculated as $1/(1+r)^2$, where y is the number of years between the date of the given cash flow and December 1, 2006, and r=12% is the rate from Copy of Andrew GAAP Statements Final motho. ANSinput. xevised. Xls, sheet "Summary Cash Flow."

[7] = [5] * [6]. [5] = [2] - [3] - [4].
 [6] Discount factor as follows, assuming mid-year cash flows: 2006 from Exhibit 19.

[4] Assumes that costs are incurred in year of deployment. Calculated as [2] for the following year. (from Exhibit 17).

Revenue from Exhibit 6).

See AND0080258 and Deposition

CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER

EXHIBIT 11

TRUEPOSITION LOST PROFIT ON SPARE PARTS FOR VAS ELEMENTS PHASE I AND PHASE II -SCENARIO 2

[6] Discount Factor to 12/1/2006			tes (4.6%)	[1] Sites Deployed [2] Spate Parts Revenue [3] Costs [4] Incremental Operating [5] Operating Profit [5] Operating Profit [6] Discount Factor to 12/1
	noremental Operating Expenses (4.6%)	dental Operating Expenses (4.6%)		Operating Profit
Operating Profit			крепзек (4.6%)	ncremental Operating
Spars Parts Revenue Joséss Doséss Derendendel Operating Expenses (4.6%)				sites Deptoyed

[4] Assumes that coats are incurred in year of deptoyment. Calculated as [2] for the following year [5] = [2] - [3] - [4]. [6] Discount factor as follows, assuming mid-year eash flows:

[3] Assumes that costs are incurred in year of deployment. Calculated as [2] for the following year (the ratio of TruePosition Spare Parts for VAS Elements Costs to TruePosition Spare Parts for VAS Elements

[2] From Exhibit 8. Assumes that revenue is only received on sites deployed in 2006 and 2007, and that revenue is

of Randy B. Wynn, October 10, 2006, at 149-51 and PX-146.

[1] Assumes that

received one year after sites are deployed.

(from Exhibit 17).

Revenue from Exhibit 6).

2007 through 2011 calculated as $1/(1+r)^{\gamma}$, where y is the number of years between the date of the given cash flow and December 1, 2006, and r = 12% is the rate from Copy of Andrew GAAP Statements Final moho. ANSinput.revised.xls, sheet "Summary Cash Flow." 2006 from Exhibit 19.

[7] = [5] * [6]

EXHIBIT 12

TRUEPOSITION LOST PROFIT ON ONGOING OPERATION AND MAINTENANCE LMUS PHASE I AND PHASE II -SCENARIO 2

[1] Sites Deployed

[4] Ongoing Operation and Maintenance Revenue

[5] Costs

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[6] Incremental Operating Expenses (4.6%)

[7] Operating Profit

[8] Discount Factor to 12/1/2006

[9] Net Present Value

See AND0080258 and Deposition of Randy B. Wyan, October 10, 2006, at 149-51 and PX-146.

Notes & Sources;

[1] Assumes that
[2] From Exhibit 10.
[3] Calculated as the sum of [2] over the given year and four previous years,
[4] Calculated as [3] for the given year. (the ratio of TruePosition Ong

Assumes that each installment of Hardware, Software and Services Revenue is associated with five years of Ongoing Operation and Maintenance Revenue.

Assumes that each installment of Hardware, Software and Services Revenue is associated with five years of Ongoing Operation and Maintenance Revenue.

Assumes that cocks are incurred in year of deployment. Calculated as [4] for the following year. (the ratio of TruePosition Operation and Maintenance Costs to TruePosition [5] Assumes that costs are incurred in year of deployment. Calculated us [4] for the following year

. (from Exhibit 17).

Operation and Maintenance Revenue from Exhibit 6).

[6] Assumes that costs are incurred in year of deployment. Calculated as [4] for the following year [7] = [4] - [5] - [6]. [6]. [8] Discount factor as follows, assuming mid-year cash flows:

2006 from Exhibit 19.

2007 through 2011 calculated as 1 / (1 + t), where y is the number of years between the date of the given eash flow and December 1, 2006, and r = 12% is the rate from Copy of Andrew GAAP Statements Final metho. ANSinput, revised, xls, shert "Stummary Cash Flow."

[9] = [7] * [8].

EXHIBIT 13

TRUEPOSITION LOST PROFIT HARDWARE, SOFTWARE AND PROFESSIONAL SERVICES Q-TEL PROPOSAL -LMUS

- [1] Sites Deployed [2] Revenue [3] Costs [4] Incremental Operating Expenses (4.6%) [5] Operating Profit [6] Discount Factor to 12/1/2006 [7] Net Present Value
 - Notes & Sources:
- [1]-[2] From QatarPricing_05.12.06.xls, sheet "Price-Cost." Assumes that Revenue for Hardware, Software and Professional Services would be received in mid-period 2007, and that a discount of 15% is applied; see QatarPricing_05.12.06.xls, sheet "Summary2." Training excluded due to lack of estimates on units. Revenue associated with Redknee, Agilent, Nour and Profilium excluded; see QatarPricing_04.13.06.xls, sheet "Price Quote."
 - [3] From QatarPricing_05.12.06.xls, sheet "Price-Cost." Assumes that Costs are incurred in mid-period 2007. Costs associated with Redknee, Agilent, Nour and Profilium excluded; see also QatarPricing 04,13.06.xls, sheet "Price Quote."
 - [4] Calculated as [2] (from Exhibit 17).
 - [5] = [2] [3] [4].
 - [6] Discount factor calculated as $1/(1+r)^y$, where y is the number of years between the date of the given cash flow and December 1, 2006, and r = 12% is the rate from Copy of Andrew GAAP Statements Final, mcho. ANSinput.revised.xls, sheet "Summary Cash Flow."
 - [7] = [5] * [6].

EXHIBIT 14

TRUEPOSITION LOST PROFIT OPTIONAL COMPONENTS Q-TEL PROPOSAL - LMUS

[1] Sites Deployed			
[2] Revenue	뀨		
[3] Costs	REDACTE		
[4] Incremental Operating Expenses (4.6%)	H		
[5] Operating Profit	Ū		
[6] Discount Factor to 12/1/2005			
[7] Net Present Value			

Notes & Sources:

- [1]-[2] From QatarPricing_05.12.06.xls, sheet "Price-Cost." Assumes that Revenue for Optional Components (drive test tool hardware and software) would be received in mid-period 2007, and that a discount of 15% is applied; see QatarPricing_05.12.06.xls, sheet "Summary2." Revenue associated with Redknee, Agilent, Nour and Profilium excluded; see QatarPricing_04.13.06.xls, sheet "Price Quote."
 - [3] From QatarPricing_05.12.06.xls, sheet "Price-Cost." Assumes that Costs are incurred in mid-period 2007. Costs associated with Redknee, Agilent, Nour and Profilium excluded; see also QatarPricing_04.13.06.xls, sheet "Price Quote."
 - [4] Calculated as [2] (from Exhibit 17).
 - [5] = [2] [3] [4].
 - [6] Discount factor calculated as 1/(1+r)^y, where y is the number of years between the date of the given cash flow and December 1, 2006, and r = 12% is the rate from Copy of Andrew GAAP Statements Final.mcho.ANSinput.revised.xls, sheet "Summary Cash Flow."
 - [7] = [5] * [6].

EXHIBIT 15

TRUEPOSITION LOST PROFIT **SPARES** Q-TEL PROPOSAL -LMUS

	Ì
[1] Sites Deployed	
[2] Revenue	RE
[3] Costs	REDACTED
[4] Incremental Operating Expenses (4.6%)	TED
[5] Operating Profit	
[6] Discount Factor to 12/1/2006	, <u>;</u>
[7] Net Present Value	

Notes & Sources:

- [1]-[2] From QatarPricing_05.12.06.xls, sheet "Price-Cost"; assumes that Revenue would be received in mid-period. Revenue associated with Redknee, Agilent, Nour and Profilium excluded; see QatarPricing_04.13.06.xls, sheet "Price Quote." A discount of 15% is applied; see QatarPricing_05.12,06.xls, sheet "Summary2,"
 - [3] From QatarPricing_05.12.06.xls, sheet "Price-Cost"; assumes that Costs are incurred in mid-period 2007. Costs associated with Redknee, Agilent, Nour and Profilium excluded; see also QatarPricing_04.13.06.xls, sheet "Price Quote."
 - [4] Calculated as [2] (from Exhibit 17).
 - [5] = [2] [3] [4].
 - [6] Discount factor calculated as 1/(1+r)y, where y is the number of years between the date of the given cash flow and December 1, 2006, and r = 12%is the rate from Copy of Andrew GAAP Statements Final.mcho.ANSinput.revised.xls, sheet "Summary Cash Flow."
 - [7] = [6] * [5].

EXHIBIT 16

TRUEPOSITION LOST PROFIT ON ONGOING ANNUAL SUPPORT LMUS O-TEL PROPOSAL -

[1] Sites Deployed

[2] Revenue

[3] Costs

[4] Incremental Operating Expenses (4.6%)

REDACTED

[5] Operating Profit

[6] Discount Factor to 12/1/2006

[7] Net Present Value

· by the ratio of TruePosition [1]-[2] Ongoing Annual Support Revenue from QatarPricing 05,12.06.xls, sheet "Price-Cost." All Ongoing Annual Support was discounted in bid to see QatarPricing 05.12.06.xls, sheet "Summary2." Discounted Support calculated by multiplying Notes & Sources:

Ongoing Annual Support to all Annual Support. Usage Licenses excluded due to lack of estimates on units. Revenue associated with Redknee, Agilent Nour and Profillum excluded; see also QatarPricing 04.13.06.xls, sheet "Price Quote,"

[3] Ongoing Annual Support Costs from QatarPricing_05.12.06.xls, sheet "Price-Cost." Usage Licenses excluded due to lack of estimates on units. Costs associated with Redknee, Agilent, Nour and Profillum excluded; see also QatarPrioing 04.13.06.xls, sheet "Price Quote."

(from Exhibit 17).

[4] Calculated as [2] [5] = [2] - [3] - [4].

[6] Discount factor calculated as $1/(1+t)^y$, where y is the number of years between the date of the given cash flow and December 1, 2006, and r=12%is the rate from Copy of Andrew GAAP Statements Final.mcho.ANSinput.revised.xls, sheet "Summary Cash Flow."

[7] = [5] * [6].

CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER

EXHIBIT 17

TRUEPOSITION EQUIPMENT BUSINESS - GAAP BASIS (QUARTERLY)
REGRESSION ANALYSIS

Variable			
t-statistic		REDACTED	
Coefficient		RED/	
Equation	$Y = \alpha + \beta X + \epsilon$	Subtotal Operations = $\alpha + \beta * (Revenues) + \epsilon$	
Dependent Variable	*	Subtotal Operations	
Independent Variable	×	Rovanuas	Nates & Sources: From Exlubit 18.

EXHIBIT 19

PREJUDGMENT INTEREST FACTORS

Year	Month	Annualized 3-Month T-Bill Discount Rate	Quarterly 3-Month T-Bill Discount Yield	After-Tax Quarterly T-Bill Discount Yield	After-Tax T-Bill Cumulative Interest Factor To 12/01/2006
		[A]	[B]	[C]	[D]
2005	January	2.33%	0.59%	0.38%	1.0496
	February	2,54%	0.63%	0.41%	1,0484
	March	2.74%	0.71%	0.46%	. 1.0462
	April	2.78%	0.71%	0.46%	1.0456
	May	2.84%	0.73%	0.48%	1.0441
	June	2.97%	0.76%	0.50%	1.0414
	July	3.22%	0.83%	0.54%	1.0408
	August	3.44%	0.89%	0.58%	1.0391
	September	3.42%	0.87%	0.57%	1.0363
	October	3.71%	0.96%	0.62%	1.0352
	November	3.88%	1.00%	0.65%	1.0332
	December	3.89%	0.98%	0.64%	1.0304
2006	January	4.24%	1.07%	0.70%	1.0288
	February	4.43%	1.11%	0.72%	1.0265
	March	4.51%	1.17%	0.76%	1.0239
	April	4,60%	1.18%	0.76%	1.0217
	May	4.72%	1.22%	0.79%	1.0192
-	June	4.79%	1.24%	0.81%	1.0162
	July	4.95%	1.28%	0.83%	1.0139
	August	4.96%	1.28%	0.83%	1.0111
	September	4,81%	1.23%	0.80%	1.0081
	October	4.92%	1.27%	0.83%	1.0056
	November*	4.92%	1.27%	0.83%	1.0028
	December*	4,92%	1.25%	0.81%	1.0001

Notes & Sources:

- [A] Federal Reserve Statistical Release Form H.15, Secondary Market, 3-month T-Bill Rate. * Assumed to be equal to October 2006 monthly rate.
- [B] Discount Rate converted to Yield.
- =(100 (100 (Days in Quarter / 360) * [A] * 100)) / (100 (Days in Quarter / 360) * [A] * 100).
- [C] = [B] * (1 Federal Corporate Marginal Tax Rate) where Federal Corporate Marginal Tax Rate is 35
- [D] December $2006 = (1 + [C]) ^ (1/90)$.

November $2006 = (1 + [C])^{(31/92)}$.

October $2006 = (1 + [C]) ^ (62 / 92)$.

Months before October 2006 = $((1 + [C]_t) * [D]_{t+3})$.

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

TruePosition,	Ínc.,)	•
)	•
	Plaintiff/)	
	Counterclaim-Defendant,)	
	•)	Civil Action No. 95-747-SLR
	v.)	•
•)	
Andrew Corporation,)	
)	
	Defendant/)	
	Counterclaim-Plaintiff.)	
		ز	•

CERTIFICATE OF SERVICE

I, Daniel J. Goettle, hereby certify that on this 1st day of December, 2006, I served the foregoing TruePosition's Expert Report on Damages on counsel for defendant Andrew Corporation as follows:

Via electronic mail, automatic delivery receipt requested

Rachel Pemic-Waldron Kirkland & Ellis LLP 200 East Randolph Drive Chicago, IL 60601 rpernicwaldron@kirkland.com

Patrick D. McPherson, Esq. Duane Morris LLP 1667 K Street, N.W. Washington, DC 20006-1608 PDMcPherson@duanemorris.com

Josy W. Ingersoll, Esq. Young Conaway Stargatt & Taylor, LLP The Brandywine Building 1000 West Street, 17th Floor Wilmington, DE 19801 jingersoll@ycst.com

/s/Daniel Goettle
Daniel Goettle

		Page 1			
1	UNITED STATES DISTRICT COURT	_			
2	FOR THE DISTRICT OF DELAWARE				
3	TRUEPOSITION, INC.,				
4	Plaintiff,)				
5 ·	-vs-) C.A. No.				
6	ANDREW CORPORATION,) 04-0757-SLR				
7	Defendant.)				
8					
9	CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER				
10					
11	The videotaped deposition of				
12	WAYNE HOEBERLEIN, called by the Plaintiff for				
13	3 examination, taken pursuant to the Federal Rules of				
14	Civil Procedure of the United States District				
15	Courts pertaining to the taking of depositions,				
16	taken before CORINNE T. MARUT, C.S.R. No. 84-1968,				
17	a Notary Public within and for the County of				
18	DuPage, State of Illinois, and a Certified				
19	Shorthand Reporter of said state, at the offices of				
20	Kirkland & Ellis LLP, Suite 7500, 200 East Randolph				
21	Drive, Chicago, Illinois, on the 18th day of				
22	January, A.D. 2007, commencing at 9:15 a.m.				
·23					
24	Job No.: 202342				
1					

Esquire Deposition Services (215) 988-9191

	•		PROTECTIVE ORDER			
i	Page 26 Page 28					
4		1	this report Mr. Goodman's report on infringement.			
	1 at some publicly information publicly available		Q. Okay.			
	2 information about the parties. Is that listed here		A. That would not be listed here because I.			
	3 or is that something separate?		· · · · · · · · · · · · · · · · · · ·			
	4 A. I would usually list the web sites that		had not seen it at the time, but I will — this			
	5 I reviewed, in this case, it was TPI or Liberty		will be added to this if you wanted to be totally			
6	Mutual, depending on how you got into the TPI	6 7	complete.			
7			Q. Sure. So, since you haven't read the			
8			Perry report, I assume you didn't take it into			
9			consideration in any way in forming your opinions?			
10			A. That would be correct.			
11			Q. Okay. Do you have an expectation that			
12			you will rely on testimony elicited at trial to			
13			support any of your opinions?			
14			MS. KAPPLIN: Objection; vague and overbroad,			
15			speculative.			
16			BY THE WITNESS:			
17	7 depositions, did you receive any factual		A. I haven't specifically raised that issue			
18	8 information from counsel orally?		with counsel, but my expectation would be logically			
19	9 MS. KAPPLIN: Objection; overbroad.		that I would because many of the understandings			
20	0 BY THE WITNESS:		I've obtained are from counsel and that is based			
21	1 A. I have had discussions with counsel		upon what I would believe would be testimony or			
22	about issues relating to the report and have	22	other evidence produced at trial. I don't know			
23	obtained certain understandings of factual	23	specifically what that would be, but I think			
24	situations as a result of those discussions.	24	generally that would be the case.			
<u> </u>		<u> </u>				
	Page 27	ŀ	Page 29			
1	BY MS. MILSARK:	1	BY MS. MILSARK:			
2	Q. What understandings of factual	2	Q. So, if in your report you relied on an			
.3	situations have you received from counsel?	3	understanding received from counsel, you would			
4	MS. KAPPLIN: Objection; overbroad.	4	expect that understanding to be supported by			
5	BY THE WITNESS:	5	evidence at trial, is that what you're saying?			
6	A. I think I probably need to go through	6	A. In some fashion.			
7	the report to be accurate of that.	7	MS. KAPPLIN: Same objection.			
8	BY MS. MILSARK:	.8				
			BY MS, MILSARK:			
19	O. Why don't we do it as we do through the	9	Q. What assumptions are you making with			
10	Q. Why don't we do it as we go through the report. But if as we do that you realize that it's	9	Q. What assumptions are you making with			
10	report. But if as we do that you realize that it's	9 10	Q. What assumptions are you making with respect to infringement?			
10 11	report. But if as we do that you realize that it's not clear whether it's a factual understanding you	9 10 11	Q. What assumptions are you making with respect to infringement? MS. KAPPLIN: Objection; overbroad, calls for			
10 11 12	report. But if as we do that you realize that it's not clear whether it's a factual understanding you received from documents or from counsel, I'd like	9 10 11 12	Q. What assumptions are you making with respect to infringement? MS. KAPPLIN: Objection; overbroad, calls for a legal conclusion, assumes facts not in evidence.			
10 11 12 13	report. But if as we do that you realize that it's not clear whether it's a factual understanding you received from documents or from counsel, I'd like to know if it came from counsel.	9 10 11 12 13	Q. What assumptions are you making with respect to infringement? MS. KAPPLIN: Objection; overbroad, calls for a legal conclusion, assumes facts not in evidence. BY THE WITNESS:			
10 11 12 13 14	report. But if as we do that you realize that it's not clear whether it's a factual understanding you received from documents or from counsel, I'd like to know if it came from counsel. A. Okay.	9 10 11 12 13 14	Q. What assumptions are you making with respect to infringement? MS. KAPPLIN: Objection; overbroad, calls for a legal conclusion, assumes facts not in evidence. BY THE WITNESS: A. For purposes of my report, I must assume			
10 11 12 13 14 15	report. But if as we do that you realize that it's not clear whether it's a factual understanding you received from documents or from counsel, I'd like to know if it came from counsel. A. Okay. Q. Did you talk to Mr. Perry?	9 10 11 12 13 14 15	Q. What assumptions are you making with respect to infringement? MS. KAPPLIN: Objection; overbroad, calls for a legal conclusion, assumes facts not in evidence. BY THE WITNESS: A. For purposes of my report, I must assume validity and infringement.			
10 11 12 13 14 15 16	report. But if as we do that you realize that it's not clear whether it's a factual understanding you received from documents or from counsel, I'd like to know if it came from counsel. A. Okay. Q. Did you talk to Mr. Perry? A. No.	9 10 11 12 13 14 15 16	Q. What assumptions are you making with respect to infringement? MS. KAPPLIN: Objection; overbroad, calls for a legal conclusion, assumes facts not in evidence. BY THE WITNESS: A. For purposes of my report, I must assume validity and infringement. BY MS. MILSARK:			
10 11 12 13 14 15 16 17	report. But if as we do that you realize that it's not clear whether it's a factual understanding you received from documents or from counsel, I'd like to know if it came from counsel. A. Okay. Q. Did you talk to Mr. Perry? A. No. Q. Do you know who Mr. Perry is?	9 10 11 12 13 14 15 16 17	Q. What assumptions are you making with respect to infringement? MS. KAPPLIN: Objection; overbroad, calls for a legal conclusion, assumes facts not in evidence. BY THE WITNESS: A. For purposes of my report, I must assume validity and infringement. BY MS. MILSARK: Q. Right.			
10 11 12 13 14 15 16 17 18	report. But if as we do that you realize that it's not clear whether it's a factual understanding you received from documents or from counsel, I'd like to know if it came from counsel. A. Okay. Q. Did you talk to Mr. Perry? A. No. Q. Do you know who Mr. Perry is? A. No, I don't.	9 10 11 12 13 14 15 16 17 18	Q. What assumptions are you making with respect to infringement? MS. KAPPLIN: Objection; overbroad, calls for a legal conclusion, assumes facts not in evidence. BY THE WITNESS: A. For purposes of my report, I must assume validity and infringement. BY MS. MILSARK: Q. Right. A. As I think Ms. Mulhern does as well.			
10 11 12 13 14 15 16 17 18 19	report. But if as we do that you realize that it's not clear whether it's a factual understanding you received from documents or from counsel, I'd like to know if it came from counsel. A. Okay. Q. Did you talk to Mr. Perry? A. No. Q. Do you know who Mr. Perry is? A. No, I don't. Q. Did you then I take it you didn't	9 10 11 12 13 14 15 16 17 18 19	Q. What assumptions are you making with respect to infringement? MS. KAPPLIN: Objection; overbroad, calls for a legal conclusion, assumes facts not in evidence. BY THE WITNESS: A. For purposes of my report, I must assume validity and infringement. BY MS. MILSARK: Q. Right. A. As I think Ms. Mulhern does as well. Q. It's typical in doing a damage report,			
10 11 12 13 14 15 16 17 18 19 20	report. But if as we do that you realize that it's not clear whether it's a factual understanding you received from documents or from counsel, I'd like to know if it came from counsel. A. Okay. Q. Did you talk to Mr. Perry? A. No. Q. Do you know who Mr. Perry is? A. No, I don't. Q. Did you then I take it you didn't read his report if you don't know who he is?	9 10 11 12 13 14 15 16 17 18 19 20	Q. What assumptions are you making with respect to infringement? MS. KAPPLIN: Objection; overbroad, calls for a legal conclusion, assumes facts not in evidence. BY THE WITNESS: A. For purposes of my report, I must assume validity and infringement. BY MS. MILSARK: Q. Right. A. As I think Ms. Mulhern does as well. Q. It's typical in doing a damage report, right?			
10 11 12 13 14 15 16 17 18 19 20 21	report. But if as we do that you realize that it's not clear whether it's a factual understanding you received from documents or from counsel, I'd like to know if it came from counsel. A. Okay. Q. Did you talk to Mr. Perry? A. No. Q. Do you know who Mr. Perry is? A. No, I don't. Q. Did you then I take it you didn't read his report if you don't know who he is? A. No, I have not.	9 10 11 12 13 14 15 16 17 18 19 20 21	Q. What assumptions are you making with respect to infringement? MS. KAPPLIN: Objection; overbroad, calls for a legal conclusion, assumes facts not in evidence. BY THE WITNESS: A. For purposes of my report, I must assume validity and infringement. BY MS. MILSARK: Q. Right. A. As I think Ms. Mulhern does as well. Q. It's typical in doing a damage report, right? A. It is typical, yes. Otherwise —			
10 11 12 13 14 15 16 17 18 19 20 21 22	report. But if as we do that you realize that it's not clear whether it's a factual understanding you received from documents or from counsel, I'd like to know if it came from counsel. A. Okay. Q. Did you talk to Mr. Perry? A. No. Q. Do you know who Mr. Perry is? A. No, I don't. Q. Did you then I take it you didn't read his report if you don't know who he is? A. No, I have not. Q. Okay.	9 10 11 12 13 14 15 16 17 18 19 20 21 22	Q. What assumptions are you making with respect to infringement? MS. KAPPLIN: Objection; overbroad, calls for a legal conclusion, assumes facts not in evidence. BY THE WITNESS: A. For purposes of my report, I must assume validity and infringement. BY MS. MILSARK: Q. Right. A. As I think Ms. Mulhern does as well. Q. It's typical in doing a damage report, right? A. It is typical, yes. Otherwise — Q. In fact, it's required by the law,			
10 11 12 13 14 15 16 17 18 19 20 21	report. But if as we do that you realize that it's not clear whether it's a factual understanding you received from documents or from counsel, I'd like to know if it came from counsel. A. Okay. Q. Did you talk to Mr. Perry? A. No. Q. Do you know who Mr. Perry is? A. No, I don't. Q. Did you then I take it you didn't read his report if you don't know who he is? A. No, I have not.	9 10 11 12 13 14 15 16 17 18 19 20 21	Q. What assumptions are you making with respect to infringement? MS. KAPPLIN: Objection; overbroad, calls for a legal conclusion, assumes facts not in evidence. BY THE WITNESS: A. For purposes of my report, I must assume validity and infringement. BY MS. MILSARK: Q. Right. A. As I think Ms. Mulhern does as well. Q. It's typical in doing a damage report, right? A. It is typical, yes. Otherwise —			

8 (Pages 26 to 29)

Page 50 Page 52 you testified about earlier? A. Market I could view very broadly. I'm 2 MS. KAPPLIN: Objection; vague. not sure what you -- I think I know what you mean 3 BY THE WITNESS: 3 by market. 4 A. I'm not sure what you mean by 4 I would not disagree that only TPI and "consider." Maybe you could just help me with 5 5 Andrew provide, as I understand, the UTDOA type of 6. 6 location. that. 7 BY MS. MILSARK: 7 BY MS. MILSARK: Q. Did you analyze lost profits in this 8 8 Q. And let's talk about that. 9 9 case in light of all four of those factors that you How typically in your practice do you go about deciding what the appropriate market is for 10 testified about earlier? 10 11 evaluating lost profits? A, Yes. 11 12 Which of those four factors do you 12 MS. KAPPLIN: Objection; overbroad, calls for Q. 13 believe are not met? 13 a narrative. Well, let's back up. 14 14 BY THE WITNESS: 15 I think you said and you've listed here 15 A. It's a very case-specific inquiry as to 16 on page 8 of your report, demand, absence of 16 what is being sold, both in terms of the -- what 17 acceptable non-infringing alternatives, capacity 17 the patent is -- what the patent is and what it's 18 and amount of profit. Those are the four factors 18 incorporated into and whether those are larger 19 that you testified about earlier too, right? 19 products and then what -- how many other people 20 A. Correct. 20 sell products in that -- that space and how those 21 Q. Are any of these four factors in your 21 products may differ as to capabilities or prices. view satisfied in this case? 22 I mean, it really depends upon the facts 22 23 A. I have not included any information in 23 of a particular case. 24 BY MS. MILSARK: 24 my report regarding the first factor, demand, and the third factor, the manufacturing and marketing Q. But as I understand your testimony, you don't dispute Ms. Mulhern's conclusion that this is 2 capacity. I have reviewed Ms. Mulhern's 3 3 a two-supplier market with respect to the UTDOA product at STC, is that correct? information and views on that, and I don't have 4 anything to add to that. I -- I don't have an A. Based upon what I've seen, I understand 5 argument with those factors. those are the only two companies that provide that 6 6 Q. So, you don't disagree with Ms. Mulhern we'll call that kind of slice of technology. 7 7 8 that the demand and the capacity factors are both 8 So, based on that, and, again, I'm not 9 an expert and I haven't done an independent market 9 met? 10 analysis, but what I've seen in the case I would 10 A. No, I don't. think that's correct. Q. So, the only dispute we have here is 11 11 with respect to non-infringing alternatives and 12 Q. Okay. When you refer to that slice of with respect to calculation, is that correct? 13 the technology, you've defined that as the UTDOA 13 MS. KAPPLIN: Objection; overbroad, vague. product at STC. Do you have any understanding of 14 14 15 the -- strike that. 15 BY THE WITNESS: A. My opinions go towards those two factors 16 Do you know if there are other suppliers 16 17 who can locate -- who have products that locate as well as the -- I'll call it the non-Panduit 17 factor of the standards body and what was presented 18 telephones on the control channel? 18 19 MS. KAPPLIN: Objection; overbroad, vague, 19 to them. BY MS. MILSARK: 20 calls for legal conclusion. 20 Q. Do you disagree that this is a 21 BY THE WITNESS: 21 two-supplier market? 22 A. I was okay with the guestion until you 22 23 MS. KAPPLIN: Objection; speculation. put those last two words in. Based on that, I 23 24 BY THE WITNESS: can't tell you.

14 (Pages 50 to 53)

CERTIFICATE OF SERVICE

I, James D. Heisman, hereby certify that on this 17th day of May 2007, I caused a true and correct copy of the foregoing Appendix A88-A1847 to Motion to Exclude the Testimony of Dr. Dewayne E. Perry Pursuant to Federal Rule of Evidence 702 to be served upon the following individuals via CM/ECF and in the manner indicated below:

Via e-mail and hand-delivery Josy W. Ingersoll, Esq. Young Conaway Stargatt & Taylor, LLP 100 West Street, 17th Floor Wilmington, DE 19801 iingersoll@ycst.com

Via e-mail only Rachel Pernic Waldron, Esq. Kirkland & Ellis LLP 200 East Randolph Drive Chicago, IL 60601 rpernicwaldron@kirkland.com

Via e-mail only Patrick D. McPherson, Esq. Duane Morris LLP 1667 K Street, N.W. Washington, DC 20006-1608 PDMcPherson@duanemorris.com

/s/ James D. Heisman James D. Heisman (# 2746)